

Application No. 10/709,506
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AMENDMENTS TO THE CLAIMS

1-12. (Cancelled)

13. (Currently Amended) A method for driving a liquid crystal display panel, the liquid crystal display panel comprising:

a plurality of scan lines;

a plurality of data lines; and

a plurality of pixels, each pixel has a switching device and a liquid crystal element, and the switching device is connected to a corresponding one of said scan lines line, a corresponding one of said data lines line and a liquid crystal element;

the method comprising:

~~continuously~~ receiving a plurality of frame data;

delaying the frame data to produce a plurality of ~~corresponding~~ delayed frame data corresponding to the frame data;

producing an over-drive data voltage pulse, ~~the value of which is decided by comparing a present frame data with a corresponding delayed frame data, and producing and~~ an original data voltage pulse according to the present frame data in every frame period; and

sequentially providing the over-drive data voltage pulse and the original data voltage pulse to the liquid crystal element of each the pixel in a the present frame period via the corresponding a data line connected to the pixel;

wherein the voltage value of the over-drive data voltage pulse is decided by comparing a delayed frame data in a previous frame period with a frame data in a present frame period next to the previous frame period, where if the voltage value of the frame data in the present frame period is larger than that of the frame data in the previous frame period, the voltage value of the over-drive data voltage pulse is larger than that of the frame data in the present frame period; if the voltage value of the frame data in the present frame period is smaller than that of the frame data in the previous frame period, the voltage value of the over-drive data voltage pulse is smaller than that of the frame data in the present frame period; if the voltage value of the frame data in the present frame period is equal to that of the frame data in the previous frame period,

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the voltage value of the over-drive data voltage pulse is equal to that of the frame data in the present frame period.

14. (Currently Amended) The method of claim 13, wherein when comparing the present frame data with the corresponding delayed frame data, the voltage value of the over-drive data voltage pulse is decided according to a ~~predetermined~~ table.

15. (Currently Amended) The method of claim 13, wherein each frame data comprises a plurality of pixel data and each pixel data corresponds to a one pixel of said pixels.

16. (Currently Amended) The method of claim 13, further comprising: providing a scan voltage to the switching device of a pixel of said pixels via the corresponding scan line to enable the over-drive data voltage pulse and the original data voltage pulse to be supplied to the liquid crystal element.

17. (Currently Amended) A method for driving a liquid crystal display panel, the liquid crystal display panel comprising:

a plurality of scan lines;

a plurality of data lines; and

a plurality of pixels, each pixel includes a switching device and a liquid crystal element, the switching device is connected to a corresponding one of said scan lines ~~line~~, a corresponding one of said data lines ~~line~~ and a liquid crystal element;

the method comprising:

receiving a clock signal, a synchronization signal, and a plurality of frame data;

delaying the frame data to produce a plurality of ~~corresponding~~ delayed frame data corresponding to the frame data;

producing a double-frequency clock signal which has twice the frequency of ~~in accordance with~~ the clock signal, and producing a double-frequency synchronization signal which has twice the frequency of ~~in accordance with the double-frequency clock signal and the~~ synchronization signal;

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~~producing at least an over-drive data voltage pulse, the value of which is decided by comparing a present frame data with a corresponding delayed frame data, and producing and~~ an original data voltage pulse according to the present frame data in every frame period; and

sequentially providing the over-drive data voltage pulse and the original data voltage pulse to the liquid crystal element of ~~the~~ a corresponding pixel of said pixels in accordance with the double-frequency clock signal in a the-present frame period;

wherein the voltage value of the over-drive data voltage pulse is decided by comparing a delayed frame data in a previous frame period with a frame data in a present frame period next to the previous frame period.

18.(Currently Amended) The method of claim 17, wherein when comparing the present frame data with the corresponding delayed frame data, the voltage value of the over-drive data voltage pulse is decided according to a ~~predetermined~~ table.

19. (Previously Presented) The method of claim 17, wherein the synchronization signal includes a horizontal synchronization signal and a vertical synchronization signal.

20. (Previously Presented) The method of claim 17, wherein the double-frequency synchronization signal includes a horizontal double-frequency synchronization signal and a vertical double-frequency synchronization signal.

21. (Currently Amended) The method of claim 17, wherein each frame data comprises a plurality of pixel data and each pixel data corresponds to ~~a one pixel~~ of said pixels.

22. (Currently Amended) The method of claim 17, further comprising: providing a scan voltage to the switching device of a pixel of said pixels via the corresponding scan line to enable the over-drive data voltage pulse and the original data voltage pulse supplied to the liquid crystal element.

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23. (New) The method of claim 17, wherein the voltage value of the over-drive data voltage pulse is decided as following: if the voltage value of the frame data in the present frame period is larger than that of the frame data in the previous frame period, the voltage value of the over-drive data voltage pulse is larger than that of the frame data in the present frame period; if the voltage value of the frame data in the present frame period is smaller than that of the frame data in the previous frame period, the voltage value of the over-drive data voltage pulse is smaller than that of the frame data in the present frame period; if the voltage value of the frame data in the present frame period is equal to that of the frame data in the previous frame period, the voltage value of the over-drive data voltage pulse is equal to that of the frame data in the present frame period.